MICROFABRICATED FIELD CALIBRATION ASSEMBLY

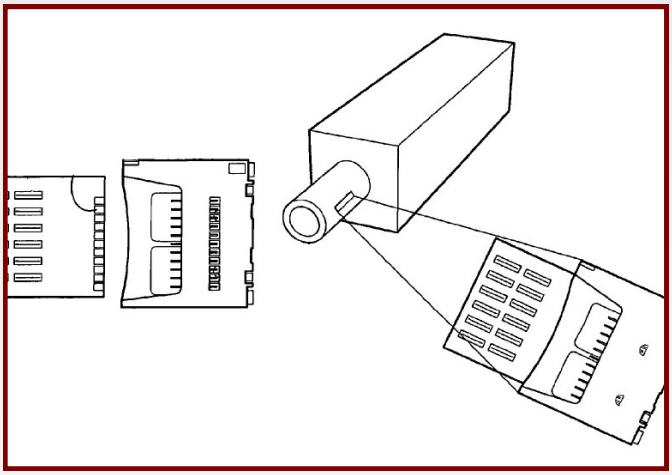
TECHNOLOGY READINESS LEVEL: 4

US PATENT # 7,913,534

(SD # 7727)

TECHNOLOGY SUMMARY

Reliable determination of the presence and/or quantity of a particular analyte in the field can be greatly enhanced if the analytical instrument is equipped with a time-of-use calibration standard. While proper calibration is necessary for reliability and accuracy, it can be challenging and cumbersome to provide such calibration in the field using conventional methods found in analytical laboratories. Sandia's Microfabricated Field Calibration Assembly is a small, easy-to-use calibration source that can be integrated with field-portable instruments, or embedded in unattended remote sensors. The Field Calibration Assembly is designed at a small scale for incorporation into the intake or housing portion of a sensor or analytical instrument. The small size and placement are conducive to calibrating in the field with quantities as low as picograms.



POTENTIAL APPLICATIONS

- Microsensors
- Analytical instruments
- Remote sensing
- Gas chromatography
- Chemical sensing

TECHNOLOGICAL BENEFITS

- Easy to use
- Small and portable
- No monitoring needed
- High accuracy with as low as pictogram aliquots
- Microfabricated
- Incorporation in existing and/or new devices

TECHNOLOGY INQUIRY?

Contact us for more information or licensing opportunities at

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or

https://ip.sandia.gov

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